

Appln. No. 10/066,827
Amdt. dated: March 19, 2004
Reply to Final Office Action dated Sept. 25, 2003

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A composite part having an integrated flow channel, comprising:
 - an elongated foam core;
 - at least one fabric layer secured to said elongated foam core and extending along a first elongated side thereof, said fabric layer enclosing an elongated channel between said first elongated side of said foam core and said fabric layer; and
 - a flow channel media disposed in said elongated channel, said flow channel media formed of a three dimensional plastic mesh having substantially less resistance to a flow of resin as compared to said fabric layer;whereby resin introduced within said elongated channel under pressure will substantially flow along a length of said elongated side.
2. (original) The composite part according to claim 1 wherein said fabric layer further encloses at least a second and third elongated side of said foam core, each of said second and third elongated sides adjoining said first elongated side.
3. (previously presented) The composite part according to claim 2, further comprising fabric tab portions extending from said second and third elongated sides.
4. (original) The composite part according to claim 1 further comprising a second flow channel media attached to said elongated foam core and extending along a second elongated side thereof, said flow channel media defining interstices for the passage of resin.
5. (original) The composite part according to claim 4 wherein said fabric layer encloses said second elongated side of said foam core, including said flow channel media, to define a second resin flow path along said second elongated side.

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6. (original) The composite part according to claim 5 wherein said second elongated side is opposed from said first elongated side.

7. (original) The composite part according to claim 1 wherein said flow channel media is bounded by a second fabric layer interposed between said foam core and said flow channel media.

8. (previously presented) The composite part according to claim 7, wherein said second fabric layer is a substantially closed fabric for preventing a passage through said second fabric of said foam core into said flow channel media.

9. (currently amended) The composite part according to claim 1 wherein said flow channel ~~medium~~ media is a three-dimensional plastic matrix.

10. (currently amended) The composite part according to claim 9 ~~where~~ wherein said flow channel ~~medium~~ media is between about 50 to 90% open space.

11. - 18. (Canceled)

¹¹ ~~19~~ (currently amended) The composite part according to claim 1, wherein said fabric layer has a porosity that selectively permits a predetermined amount of resin to escape from said flow elongated channel along said elongated length.

¹² ~~20~~ (previously presented) The composite part according to claim 1, wherein said elongated channel is disposed exclusively along said first elongated side.

¹³ ~~21~~ (previously presented) The composite part according to claim 1, wherein said flow channel media is disposed exclusively along said first elongated side.

¹⁴ ~~22~~ (previously presented) A composite part having an integrated flow channel, comprising:

an elongated foam core;

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a flow channel media attached to said elongated foam core and extending along a first elongated side thereof, said flow channel media defining interstices for the passage of resin;

at least one fabric layer secured to said elongated foam core, and enclosing said first elongated side of said foam core, including said flow channel media, to define a resin flow path along said first elongated side; and

wherein said flow channel media is bounded by a second fabric layer interposed between said foam core and said flow channel media.

15 ~~23~~. (previously presented) A composite part having an integrated flow channel, comprising:

an elongated foam core;

at least one fabric layer secured to said elongated foam core and extending along a first elongated side thereof, said fabric layer at least partially enclosing an elongated channel between said first elongated side of said foam core and said fabric layer;

a flow channel media disposed in said elongated channel, said flow channel media having less resistance to a flow of resin as compared to said fabric layer, and

wherein said flow channel media is bounded by a second fabric layer interposed between said foam core and said flow channel media.

16 ~~24~~. (previously presented) The composite part according to claim ~~23~~, wherein said flow channel media has less resistance to a flow of resin as compared to said second fabric layer.

17 ~~25~~. (currently amended) The composite part according to claim ~~23~~, wherein said flow channel ~~medium~~ media is a three-dimensional plastic matrix of fibers joined at the intersections thereof.

18 ~~26~~. (currently amended) The composite part according to claim ~~23~~, wherein said flow channel ~~medium~~ ~~comprised~~ comprises between about 50% to 90% open space.

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19/27. (currently amended) The composite part according to claim 23, wherein said fabric layer has a porosity that selectively permits a predetermined amount of resin to escape from said ~~flow~~ elongated channel along said elongated length.

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